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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 10/712,590      | 11/13/2003  | Michael A. Yandrasits | 59390US002          | 8997             |

32692 7590 11/08/2006

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| EXAMINER |
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MCCLENDON, SANZA L

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| ART UNIT | PAPER NUMBER |
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1711

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/712,590             | YANDRASITS ET AL.   |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Sanza L. McClendon     | 1711                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13-15, 18-20, 23-25 and 28-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 13-15, 18-20, 23-25, 28 and 29 is/are allowed.
- 6) ☒ Claim(s) 30-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/22/05</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1711

## **DETAILED ACTION**

### ***Response to Amendment***

1. In response to the Amendment received on August 29, 2006, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claims 11-12, 16-17, 21-22, and 26-27.

### ***Response to Arguments***

2. Applicant's arguments, see Remarks/Amendment, filed August 29, 2006, with respect to claims 1-10, 13-15, 18-20, 23-25, 28-39, 42-44, 47-49, 52-54 and 57-58 have been fully considered and are persuasive. The rejection claims 1-10, 13-15, 18-20, 23-25, and 28-39, 42-44, 47-49, 52-54, and 57-58 under 35 USC 103(a) as being anticipated by Asawa et al (JP 54-052690) has been withdrawn.

However claims 30-58 under 35 USC 102(b) still remains in effect. Applicant has not overcome this rejection, since applicant has not set forth how the polymer electrolyte membrane of Asawa et al is distinguished over the presently claimed polymer electrolyte membrane. The examiner has previously deemed that said crosslinked membrane of Asawa et al appears to be the same as instantly claimed. This is deemed because the second pendent group (Br as instantly claimed and I as found in the cited art) will be liberated upon once crosslinking takes place. Because there is not functional limitation asserted to be critical for establishing novelty in the claimed subject matter, the examiner deems these polymer electrolyte membranes of claims 30-58 appear to be the same polymer electrolyte membrane as described in Asawa et al, since it has been previously recognized by the courts that where the prior art discloses a product that appears to be either identical with or only slightly different from the product claimed in a product-by-process claim; the Patent Office can require applicant to prove that the prior art product does not necessarily or inherently possess characteristics of his claimed product.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1711

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 30-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Asawa et al (JP 54-052690).

Asawa et al teaches improved fluorine-containing cation exchange membranes. Said membranes are obtained by casting and then crosslinking a fluoro-polymer using ionizing radiation—see page 11, wherein electron beam radiation is a well-known and accepted form of ionizing radiation. Said polymer is prepared by copolymerization of an iodine-containing vinyl-ether, a fluorinated olefin, and a fluorine-containing monomer having an ion exchange group or functional group convertible to an ion exchange group. Said membrane is formed by cast said monomer solution and crosslinking using radiation. Said crosslinked polymer and polymer electrolyte membranes appear to anticipate the instantly claimed polymer membranes. Since there is no functional limitation asserted to be critical for establishing novelty in the claimed subject matter, the examiner deems these appear to be the same polymer electrolyte membrane, since it has been recognized by the courts that where the prior art discloses product that appears to be either identical with or only slightly different from product claimed in product-by-process claim; Patent Office can require applicant to prove that prior art products do not necessarily or inherently possess characteristics of his claimed product.

#### ***Allowable Subject Matter***

5. Claims 1-10, 13-15, 18-20, and 23-29 are allowed.

6. The following is an examiner's statement of reasons for allowance: The prior art, taken alone or in combination, does not fairly teach or render obvious the instantly claimed method of making a crosslinked polymer comprising using a fluorinated polymer having a 1<sup>st</sup> pendent group as instantly claimed and a second pendent group that includes a Br (halogen) and then exposing said fluorinated polymer to electron beam irradiation such that crosslinks result.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany

Art Unit: 1711

the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***


7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Sanza L. McClendon 1/2/09  
Examiner